



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Control Number: R8-0300122

Steven D. Landau
Manager, Environmental Affairs
Cotter Corporation
7800 E. Dorado Place, Suite 210
Englewood, CO 80111

Re: Current status of CERCLA Off-Site Rule at Cotter
Uranium Mill; Responses to Information Provided
by Cotter

Dear Mr. Landau:

This letter summarizes the resolution of a number of issues relating to the application of the CERCLA Off-Site Rule (OSR) at the Cotter Uranium Mill in Canon City, Colorado, notes an issue that needs final resolution, and presents the current status of the OSR relative to Cotter. We are also responding to a number of information submittals that Cotter provided in response to EPA's OSR Notice of Unacceptability (NOU) of January 3, 2003, and providing our formal response to information presented by Cotter to EPA and the Colorado Department of Public Health and Environment (CDPHE) during the Informal Conference conducted on January 28, 2003. Finally, this letter addresses other correspondence and issues relating to the Cotter mill, including your letter to EPA dated February 3, 2003, a commitment letter from Cotter to CDPHE dated February 18, 2003, and recent correspondence from CDPHE to Cotter.

In summarizing the OSR issues for the Cotter mill, we have organized our comments under the four primary issues that served as the basis for the January NOU. The NOU listed three findings of relevant violations and one finding of an uncontrolled release. We have also included a discussion of our concerns based on a combination of the first two issues.

ISSUE 1 - MATERIALS TRACKING SYSTEM

This violation cited in the NOU was based on Cotter's lack of full compliance with CDPHE Radiation Regulations that require each licensee to maintain records showing the receipt, transfer, and disposal of all sources of radiation. This requirement was addressed in the CDPHE Notice of Violation (NOV) dated April 23, 2002 (Item of Concern D), and in subsequent correspondence.



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During the informal conference of January 28, 2003, Cotter stated that it planned to comply with the pertinent Colorado requirements in this area by submitting a radioactive materials tracking system to be incorporated in its license. We understand that it is Cotter's intent to use this system as a means to establish and maintain an inventory of all radioactive materials at the facility to satisfy the CDPHE Radiation Regulations. EPA has learned that a materials tracking system has been submitted to CDPHE and subsequently incorporated into the license. EPA has been informed by CDPHE that this materials tracking system appears to be adequate to establish and maintain an inventory.

EPA considers this issue resolved.

ISSUE 2 - MATERIALS ACCEPTANCE PROCEDURE

This finding cited in the NOU was based on Colorado requirements located at RH 3.9.2 of the CDPHE Radiation Regulations. In the NOU, EPA referenced CDPHE statements that Cotter had not provided sufficient acceptance procedures for receipt of alternate feed materials, particularly the need to obtain State approval prior receipt of such materials. This issue was addressed in the NOV of April 23, 2002 (Item of Concern F), and in subsequent correspondence.

In its letter of February 3, 2003, Cotter contested this finding, particularly the relation of Item of Concern F to the finding. In that same letter, however, Cotter indicated its intent to submit material acceptance procedures that require Cotter to obtain CDPHE's authorization prior to: (1) the receipt of materials that are alternate feed stocks for the purposes of processing; and (2) the receipt of non-type 2 byproduct materials¹ for direct disposal. In its February 18, 2003 letter to CDPHE, Cotter committed that they would notify and obtain approval from the Department of Energy (DOE) prior to the direct disposal of non-type 2 materials. CDPHE has accepted this commitment from Cotter and has incorporated it into the license. A more formal amending of the license to address material acceptance procedures may occur in the context of the current license renewal process.

EPA considers this issue resolved.

COMBINATION ISSUE

As noted above, EPA has been concerned with the effects that the combination of these first two issues may have on the transfer of the title to the impoundments to the Department of Energy (DOE) upon closure. As we stated in our letter to CDPHE dated September 13, 2002, one of our overriding interests in this situation is to assure compliance with Domestic Licensing of Source Material rules found at 10 CFR Part 40 and applicable State rules at RH 18.1.3. These rules require, in part, that "Disposal at a uranium or thorium processing site of material which is not type 2 byproduct material must not inhibit reclamation of the tailings impoundment or the ability of the U.S. Government to take title to the impoundment as long-term custodian."

Our concerns in this area relate to the need to assure that all materials already in the impoundments or proposed for such disposal will not interfere with transfer of the title. According to the Nuclear Regulatory Commission's *Interim Guidance on Disposal of Non-*

¹ Type 2 byproduct materials as defined by Colorado Radiation Control Act are the same as byproduct materials defined under Section 11e.(2). of the Atomic Energy Act.

Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments, licensees are required to demonstrate that any “proposed disposal will not compromise the reclamation of the tailings impoundment.” This guidance also requires that “a concurrence and commitment from either DOE or the State to take title to the tailings impoundment after closure must be received before granting the license amendment to the 11e.(2) license” for facilities that directly dispose of materials that are not 11e.(2).

In this case, EPA’s interest is in assuring compliance with these requirements for past, present and future materials that may not be type 2 [“non-11e.(2)” materials] as follows:

1. *Past*: Cotter’s new materials tracking system contains data indicating that some non-type 2 byproduct materials have been placed in the impoundments, including waste and residues from the vanadium processing circuit. Consequently, Cotter will need to obtain a DOE concurrence and commitment letter that addresses the specifics of these materials, their presence in the impoundments, and a concurrence that they will not inhibit transfer of title.

Once Cotter receives this DOE letter, EPA will consider this issue resolved.

2. *Present*: Cotter has accumulated over 3000 drums of calcium fluoride (CaF₂) materials from the Honeywell facility in Illinois and has been storing them on-site for over two years. In a recent amendment to an order to Cotter dated July 25, 2003, CDPHE has authorized and directed Cotter to begin processing the current 3000 drums and an additional 3000 drums, provided this processing begins by August 29, 2003, and is completed by July 25, 2005. It is our understanding that Cotter has committed to complete the processing of the CaF₂ per this schedule. CDPHE has informed us that Cotter has successfully begun processing the CaF₂ consistent with the schedule of the amended order and they fully expect Cotter to meet the completion date.

This matter is considered resolved, subject to Cotter’s continued compliance with the order.

3. *Future*: Cotter is considering a zirconium processing circuit that could result in materials that would not likely be type 2 byproduct materials being placed in the impoundments. EPA notes that a concurrence/commitment from DOE will be needed prior to placement of any non-type 2 byproduct materials in the impoundments.

This matter will be addressed between Cotter and CDPHE in the future, and is not a factor in this OSR determination.

ISSUE 3 - UNCONTROLLED RELEASE

The third issue in the NOU relates to a finding of an uncontrolled environmentally significant release. During a site visit at Cotter, EPA and CDPHE observed that liquids weeping through the walls of one of the counter-current decantation (CCD) tanks were running onto a deteriorating concrete pad under the tank and entering the soils beneath the tank. An administrative control on that release had not been established pursuant to the criteria of the OSR.

In its letter of February 3, 2003, Cotter challenged the applicability of the OSR criterion for releases at uranium mills. Cotter cited Section 40 CFR 300.440(b)(2) of the OSR for the acceptability criteria for releases, including the reference to the term release found in § 300.5 of this part. Cotter also noted that the definition of the term “release” found in § 300.5 appears to exclude any release of source, byproduct, or special nuclear material from any processing site designated under section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978. Cotter concluded that the OSR release criterion does not apply to uranium mills.

Nonetheless, in a letter to CDPHE dated February 18, 2003, Cotter committed to characterize the nature and extent of soil and ground water contamination beneath the CCD tanks in a manner consistent with the substantive requirements of the OSR. Cotter proposed that this study be incorporated into the facility’s Radiation Material License. EPA and CDPHE both note that such characterization is also needed to provide information for an accurate assessment of financial assurance requirements to address closure of the facility.

CDPHE has informed EPA that Cotter has submitted, as part of the license renewal process, a work plan to address the release around the CCD tanks. CDPHE expects this work plan, at a minimum, will require soil borings, and grab samples to be taken as the first step toward characterization of the release. The work plan is currently under review by CDPHE and will be incorporated into the license upon approval.

Consequently, the release is considered controlled and this issue is considered resolved.

ISSUE 4 - EQUIPMENT MAINTENANCE VIOLATION

This violation cited in the NOU found Cotter to be in violation of its Radioactive Materials License for failure to maintain each process, storage, containment, monitoring, and safety system in good working order as it applies to the CCD tanks. This requirement was addressed in the CDPHE Notice of Violation (NOV) dated December 12, 2002.

We understand that Cotter contested this finding in correspondence dated January 10, 2003, that was addressed to CDPHE. However, through your letter of February 3, 2003 to EPA, you informed us that, in response to the State’s concern, the CCD system has been inspected by a Professional Engineer and no immediate safety or structural concerns were revealed. CDPHE has informed EPA that the same Professional Engineer has submitted to Cotter a report that provides a schedule for the ongoing maintenance of the CCD tanks. CDPHE has also informed us that Cotter submitted a letter that commits Cotter to comply with this schedule and brings Cotter back into compliance with this requirement.

EPA considers this issue resolved.

SUMMARY OF OSR STATUS OF THE ACCEPTABLE AND PROPOSED UNITS

Cotter either has or is seeking OSR acceptability status for seven materials handling units at its facility: the two impoundments and five other units (the rail spur, three storage pads, and the mill processing circuit). As noted above, Cotter has resolved most of the four original issues that the NOU of January 3, 2003 cited as relating to these units. The only unresolved matter is part of the “combination” issue that includes elements of the first two issues. This final issue will be considered resolved when Cotter obtains the required DOE concurrence and commitment

letter that addresses the past disposal of vanadium and other non-type 2 materials into the impoundments.

The future status of the facility and its units under the OSR will depend on Cotter's ability to maintain compliance with its license conditions and any other requirements applicable to the facility.

If you have any questions, please contact Terry Brown, Region 8 CERCLA Off-Site Rule Coordinator, at (303) 312-6419.

Sincerely yours,

Stephen S. Tuber
Assistant Regional Administrator
Office of Partnerships and Regulatory Assistance

cc: Joe Schieffelin, CDPHE
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